

REMARKS

As a preliminary matter, claims 4, 6, and 8 are amended to recite the “data” as “managed data” to clarify the claim language. This amendment is merely cosmetic, and does not affect the scope of claims 4, 6 or 8.

Claims 1, 4, 10, 13 and 16 stand rejected under 35 U.S.C. 102(e) as being anticipated by Chaudhuri et al. (U.S. Patent No. 6,223,171, hereinafter Chaudhuri ‘171) in view of Lohman et al (U.S. Patent No. 6,356,889, hereinafter Lohman). In response, Applicants amended the independent claims to clarify that the retrieving of the data from the database occurs “dynamically” and “without user interaction,” and respectfully traverse the rejection as it applies to the amended claims.

The Examiner cites Chaudhuri ‘171 as teaching at col. 20, Ins. 20-35 indexes for enhancing performance in processing queries. However, the indexes do not automatically retrieve data from a database. Therefore, as further discussed below, Chaudhuri ‘171 can not dynamically retrieve data, without user interaction, from a database by using a dynamically generated index.

Chaudhuri ‘171 discloses an analysis utility for database systems to improve performance of database systems. The apparatus of Chaudhuri ‘171 does not retrieve data from a database automatically. This is because a unit for generating and analyzing an index in the apparatus and the retrieval of data from a database using the index are separate from each other.

In Chaudhuri '171, a work file is generated by, for example, a profiler belonging to a database that has a history file of records of situations associated with previously performed accesses. (See col. 6, lns. 50-59). Chaudhuri '171 merely describes a method for progressing an analysis based on a work file, and using an interface connected to a database server. (See col. 12, lns. 33-34). The apparatus of Chaudhuri '171, which is a functional unit having functions including that of analyzing an index, is independent from a database. Thus, since this apparatus is configured in the above-described manner, the apparatus cannot dynamically retrieve the data from the database without user interaction, by using the dynamically generated index. Chaudhuri '171 merely describes a method in which a user reviews and analyzes situations associated with previously performed accesses, and generates an index at a certain point and time (*i.e.*, a method in which an ANALYZE sentence is executed). (See col. 18 et seq.).

The Examiner also cites Lohman as teaching at col. 7, lns. 15-18 the limitation of retrieving the data from a database by using a dynamically generated index. The query optimizer in Lohman, however, determines materializations that are recommended to the user but data is not retrieved automatically. Therefore, Lohman cannot dynamically retrieve data from a database without user interaction, by using a dynamically generated index.

The method described in Lohman does not retrieve data from a database automatically. Lohman has materializations, such as indexes, to enhance performance.

However, Lohman does not retrieve data from the database because the method described in Lohman concludes with determining and recommending of materializations. (See col. 3 et seq.).

Lohman has different queries for generating multiple materializations. Lohman merely describes a method of analyzing multiple materializations along with optimal queries in order to determine and create or recommend a materialization to be used. (See col. 3). Lohman can not automatically retrieve data from a database.

In contrast, the present invention now recites “dynamically” retrieving data “without user interaction” from a database by using a dynamically generated index. A function unit retrieves data from the database automatically, without user interaction. Since Chaudhuri ‘171 and Lohman fail to disclose or suggest the feature of “dynamically” retrieving data from the database, without user interaction, withdrawal of the §102(e) rejection of claims 1, 4, 10, 13 and 16 is respectfully requested.

Claims 3, 8, 12 and 15 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lohman, and further in view of Chaudhuri et al. (U.S. Patent No. 6,169,983, hereinafter Chaudhuri ‘983). Applicants respectfully traverse the rejection for the reasons recited above with respect to the §102(e) rejection of claims 1, 4, 10, 13, and 16.

Chaudhuri ‘983 suffers from the same deficiencies of the Lohman and Chaudhuri ‘171 references, as noted above. More specifically, there is no automatic retrieval of data from a database. Instead, Chaudhuri ‘983 simply does not dynamically

retrieve data from the database without user interaction. Chaudhuri '983 has separate units generating and analyzing an index, and functioning as a database server. Accordingly, since the combination of the above-mentioned references fails to overcome the deficiencies noted above with respect to Lohman, withdrawal of the §103(a) rejection of claims 3, 8, 12 and 15 is respectfully requested.

Claims 2, 6-7, 11 and 14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lohman, and further in view of Smith et al. (U.S. Patent No. 5,404,510). Applicants respectfully traverse the rejection for the reasons recited above with respect to the §102(e) rejection of claims 1, 4, 10, 13 and 16.

The deficiencies of Lohman are noted above. Smith is merely cited for teaching that a new index is generated by using a first index, if the first index which satisfies a wider condition exists. That is, Smith is cited for teaching a method of index selection. However, Smith also fails to overcome the deficiencies of the other references, as noted above, and therefore withdrawal of the §103(a) rejection of claims 2, 6-7, 11 and 14 is respectfully requested.

Claim 5 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Chaudhuri '171 and Lohman as applied to claim 1 above, and further in view of Smith. Applicants respectfully traverse the rejection for the reasons recited above with respect to the rejection of independent claim 1.

Since claim 5 depends upon claim 1, claim 5 necessarily includes all of the features of its associated independent claim plus other additional features. Thus,

Applicants submit that the §103(a) rejection of claim 5 has also been overcome for the same reason as mentioned above to overcome the rejection of independent claim 1. Applicants respectfully request that the §103(a) rejection of claim 5 also be withdrawn.

Claim 9 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Lohman and Chaudhuri '983 as applied to claims 3, 8 13, and 15 above, and further in view of Smith. Applicants respectfully traverse the rejection for the reasons recited above with respect to the rejection of independent claim 3.

Since claim 9 depends upon claim 3, claim 9 necessarily includes all of the features of its associated independent claim plus other additional features. Thus, Applicants submit that the §103(a) rejection of claim 9 has also been overcome for the same reason as mentioned above to overcome the rejection of independent claim 3. Applicants respectfully request that the §103(a) rejection of claim 9 also be withdrawn.

For all of the foregoing reasons, Applicants submit that this Application is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned attorney if an interview would expedite prosecution.

Respectfully submitted,

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